

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. **(Currently Amended)** Software for diagnosing a memory system including a plurality of memory system devices, the software embodied in computer readable media and when executed operable to:

provide an interface for user selection of at least one memory system device for isolation;

facilitate isolation of the at least one selected memory system device by disabling all system memory devices except the at least one selected memory device or disabling the at least one selected memory device; **and**

perform at least one diagnostic test on a first one of the at least one isolated memory system device; and

repeat the isolation and diagnostic test operations for at least a second memory system device; **without rebooting the system.**

wherein the isolation and diagnostic test operations for the first and second memory system devices are performed during the same BIOS utility session.

2. (Cancelled)

3. (Original) The software of Claim 1, further operable to log one or more results from the memory system device diagnostic test.

4. (Original) The software of Claim 1, further operable to maintain isolation of each memory system device whose diagnostic test indicates faulty operation.

5. (Original) The software of Claim 1, further operable to report each memory system device whose diagnostic test indicates faulty operation.

6. (Cancelled)

7. (Previously Presented) The software of Claim 1, further operable to effect the facilitate and perform operations on at least one memory slot of the memory system.

8-9. (Canceled)

10. **(Currently Amended)** Software for managing a memory system having a plurality of memory system devices, the software embodied in computer readable media and when executed operable to:

receive a user selection of an operating state for a first selected memory system device;

alter the operating state of the first selected memory system device in accordance with the user's operating state selection;

perform at least one diagnostic test on the first selected memory system device; and

repeat the user selection, operating state altering, and diagnostic operations for a second memory system device; ~~without rebooting the system~~

wherein the user selection, operating state altering, and diagnostic operations for the first and second memory system devices are performed during the same BIOS utility session.

11. (Original) The software of Claim 10, further operable to communicate an operating state for each memory system device.

12. (Original) The software of Claim 10, further operable to maintain the selected operating state through subsequent information handling system boot operations.

13. (Cancelled)

14. (Original) The software of Claim 10, further operable to disable a memory card slot of the memory system, the memory card slot adapted to support a dual-channel memory card.

15. **(Currently Amended)** An information handling system, comprising:
a plurality of memory slots operable in at least one of a plurality of operating states;
at least one processor operably coupled to the memory slots; and
a program of instructions embodied in computer readable media and executable by the processor, the program of instructions operable to:

effect a user selected operating state for a first one of the plurality of memory slots **during a particular BIOS utility session;**

allow a user to selectively toggle the operating state for the first memory slot between enabled and disabled **during the particular BIOS utility session;**

initiate a diagnostic routine to test the first memory slot **during the particular BIOS utility session;** and

repeat the diagnostic routine for a second one of the plurality of memory slots **during the particular BIOS utility session without rebooting the system.**

16. (Original) The information handling system of Claim 15, further comprising the program of instructions operable to:

display a memory slot representation corresponding to a respective one of the plurality of memory slots; and

communicate an operating status for each displayed memory slot representation, the operating status corresponding to an operating state for each respective memory slot.

17. (Original) The information handling system of Claim 15, further comprising:
a basic input/output system memory operably coupled to the processor;
a basic input/output system program stored in the basic input/output system memory;
and
the program of instructions incorporated in the basic input/output system program.

18. (Original) The information handling system of Claim 15, further comprising the program of instructions operable to maintain the selected operating state of the memory devices through additional information handling system operations.

19-20. (Cancelled)

21. (Previously Presented) The information handling system of Claim 15, further comprising the program of instructions operable to prevent communication with a memory module disposed in a memory slot in the disabled operating state.

22. **(Currently Amended)** A method for identifying faulty devices in a memory system including a plurality of memory slots and a plurality of memory modules disposed in at least a portion of the plurality of memory slots and wherein the memory slots are controllable from a basic input-output system (BIOS) utility, comprising:

receiving from a user a selection of one or more memory modules for isolation;
isolating, via a BIOS utility setting, the one or more memory modules selected by the user;

disabling any remaining memory modules via the BIOS utility setting;
performing at least one diagnostic test on at least a first one of the one or more isolated memory modules, the diagnostic test operable to produce at least one result; and
repeating the isolating, disabling, and diagnostic operations for at least a second memory module; ~~without rebooting the system.~~

wherein the isolation and diagnostic test operations for the first and second memory modules are performed during the same BIOS utility session.

23-24. (Cancelled)

25. (Previously Presented) The method of Claim 22, further comprising performing diagnostic testing on a memory module associated with the isolated memory system device.

26. (Original) The method of Claim 22, further comprising performing diagnostic testing on the memory slot associated with the isolated memory system device.

27. (Original) The method of Claim 22, further comprising reporting any memory system devices whose diagnostic test results indicate faulty operation.

28. (Original) The method of Claim 22, further comprising maintaining, via BIOS utility settings, disability of those memory system devices whose diagnostic test results indicate faulty operation.

29. (Previously Presented) The method of Claim 22, further comprising:
logging the results for the diagnostic test performed on each isolated memory system device; and
reporting to a user those memory system devices whose logged results indicate faulty operation upon completing diagnostic testing.

30. (Previously Presented) The software of Claim 1, further comprising performing at least one diagnostic test on each of the at least one isolated memory system device.

31. (Previously Presented) The software of Claim 1, wherein the at least one isolated memory system device includes the second memory system device.

32. (Previously Presented) The software of Claim 1, wherein the at least one isolated memory system device does not include the second memory system device.